

AZ0633.ST25.txt  
SEQUENCE LISTING

<110> AstraZeneca AB  
Edlund, Anders  
Ekstrand, Jonas  
Johansson, Thore  
Leonardsson, Goran

<120> HUMAN GABA B RECEPTOR 1 PROMOTERS

<130> 1103326-0633

<140> 09/622,745

<141> 2000-08-22

<150> PCT/SE00/00878

<151> 2000-05-04

<160> 26

<170> PatentIn version 3.2

<210> 1

<211> 3903

<212> DNA

<213> Homo sapiens

<220>

<221> Misc\_signal

<222> (1497)..(1503)

<223> Pla

<220>

<221> GC\_signal

<222> (3009)..(3016)

<223> Complement

<220>

<221> GC\_signal

<222> (3037)..(3044)

<220>

<221> GC\_signal

<222> (3116)..(3123)

<223> Complement

<400> 1

gatcatatta atttgaaggt ggcggggcag gatggttctg tgggtgcagtt taagattaag	60
aggcatacac cacttagtaa actaatgaaa gcctattgtg aacgacaggg attgtcaatg	120
aggcagatca gattccgatt cgacgggcaa ccaatgaaac agacacacct gcacagttgg	180
aaatggagga tgaagataca attgatgtgt tccaacagca gacgggaggt gtctactgaa	240
aagggaaact gcttctttac tccagaactc tgttctttta agaccaagat tacattctca	300
attagaaaac tgcaatttgc ttccaccaca tcttgactac taccgtatag ttttctctat	360
tctttcattt ccccttccc cattccttta ctgtacataa agtaactggt atatgtgcac	420
aagcatatta cttttttttt ttaaaactaa acagccaatg gtatgttttg attgacatca	480

Page 1

AZ0633.ST25.txt

agtggagacg ggggggaaaa tactgattct gtgaaaatac cccctttctc cattagtggc	540
atgctcattc agctctttatc tttatattcc agtaagtatt tttgctctca ctgttttaac	600
aacaacaaca aaaaaacaac aacataaaaa tccttgcata ccttgttcaa ttggagaatt	660
ttaatgtttt tcaittatca ttgtaaaacc aaggacaatt ttataacttt ttgtactta	720
gctgttacat gcagagcaat ctgtctttaa gtaggataa attactctaa aacaaaaaag	780
aatcctagat agttttccct tcaagtcaag cgtcttggtt tttaaataaa cttcttggtt	840
aaaaaaaaaa aaagtaaaaa agaaaagtta tgcaacaatt aatggcccag aggcaatcct	900
tgtaacatt ttgatgcac ttttagctgt tttttttttt tttttttttt ttgactgagt	960
ttgactcttg tcaaccaggc tgaagtcaa tggcatggca tgatcttggc tcaactgcaac	1020
ctccgctcc cgggttcaag tgattctcct gcctcagcct cctgagtagc taggattacg	1080
ggcatgcacc accatgcctg gctaattttg tatttttagt agagtgggg cttctccaca	1140
ctggtcaggc tggctctgaa ctcccaacct cagggtataa ggggaagggc actattgaca	1200
tttatggttg gggcagaggt gtaagatatt cttcaaagca ctacctacat gttgaagaat	1260
tgttctcac ccagattctc aaaagtcccc caggacattc acgtagtga aacctgtgtt	1320
taattatctg agcctataac ttaatacagt tttaaaattt ttttttaa atacagtga	1380
ctttctagga atgcaattat agttgtgtgt aaaattaggg aaaattaaact ttgctaccaa	1440
gagttgttca acattttgtt aaatcacttc attgatggca acatgctgga ggtagttgag	1500
tcaccaactc agcacctgga tcagcctgtg ttggtagcag tttcatcccc gtggttctgt	1560
gaataggttg aagcatctgc ttactccatc aggacttcta gggtagtcgg gccttggcac	1620
tcacacatta aaatactgtt tatgttattt tattgcaagt tacttttctt tcatttcccc	1680
tttacgttac agaaagggaa gcattttgct ttctgtttaa agttgtgtat gtaggtaggt	1740
tatatcatct awgactttct ctccctcctt ccttttcttt ttgtttgaga tggagtcttg	1800
ctctgtcacc caggctggag tgcagtgtg cgatcttggc tcaactgcaac ctctgcctcc	1860
cgggttcaag cgattctggt gtctcagctg ggattacagg cgcacaccat cacaccacgc	1920
taatttttct atttttagta gagatggggg ttccgcatgc tggccaggcc aggcgtgtct	1980
caaactcctg agctcaagt atcagtcctc ctccgctcc caaagttctg ggatttcagg	2040
cgtgagcctc atctatgaat ctcaatttag gacagtaaaa gtgtcattac aaaaatattt	2100
attgtaaaaa agggttggag gttgagaatc tcaattctag tcagtcctc agtgtttggt	2160
ttcttctac catttttccc cctaggacca gccagaaagc agcttttttt ttgtccccc	2220
caacaaggag cccactgttt cctctcccag cccaaactca ggcttacgaa caacaacagc	2280
actacacaca cacacacaca cacacacaca cacacacaca caccctcca cttaaggta	2340

AZ0633.ST25.txt

tagccaagag cttctggagc cgtcaaaaag gtctgtacct gctgtcttta gagcttccag 2400  
 ttgccccttg gtcaagaaat actgtttgct aggtctctgct ggagtacatc aggtataact 2460  
 ggcttctaaa ccacctgag gttcttttct cttgtccttt tactcccttc gtacttcaat 2520  
 ttctctcctt gatgtccccc tccctgtttt gttttttgcc tccaatccgt tctgcgcgtt 2580  
 cccctgcagag caggcgagta gcaatgctgc tggaccatgg agctgctcta gtctcccaga 2640  
 aatctcttct acaccaacc cttcttgccg ttaggtggtc ctcagtcctc cttccccacc 2700  
 tccttctgac ccaggcttct ttctcgccct ccggtcgcag ttctcctggg catctgcctc 2760  
 tgctctcttc ctctcaccg gatctagggc tgcttctctt ttgtgcagcc gtctttctcc 2820  
 accttcatcc cagactccct gtctcagcgc cagctcctct gcctttggct cgggttccct 2880  
 ctccccacc ccagcttcca gttgtttggc ccgcagggtc ctcggcagtg accggcgccc 2940  
 cccgacgagt gcgtgtgcac caggcacct ccctctcccc cactctcag ccccgcgctt 3000  
 ctccaccgcc cgccccaccg cgtgtgggc ggtccagggc ggggctggga tccggggcgg 3060  
 ctccgggggc tcgggttggt ggaggcgccc tctccccgtt ctccccctct cttccccccg 3120  
 ccttgccctt ccttgacccc tcttcttctt ctccgcccgg gagctctccc tggctccccg 3180  
 cgccgctctt tccctccccg gctccccgtt ccccgctccc gtggctgccg ccgccccggg 3240  
 gaagaagaga caggggtggg gtttggggga agcgagagag gaggggagag accctggcca 3300  
 ggctggagcc tggattcgag gggaggaggg acgggaggag gagaaggtg gaggagaagg 3360  
 gaggggggag cggggaggag cggccgggccc tggggccttg agggccgggg agagccgggg 3420  
 agccggggccc gcgcgccgag gtaagagcca gggccccggg ttagcagggc tcggagaggg 3480  
 ggcgcgcggc gtggtggggg agggggcagt gggcgcaggg cccagctggg ggaagcgggg 3540  
 ctgggggaga ggaggaaccg cggggatgga atcggggagc gctgaggcgg ccgatgccgg 3600  
 gagcgtgggt aagccaggct tctgcgagcc gcgggggccc ggggagaggga ggtggtgaga 3660  
 ggtggagtcc gggagggttg ggggcccagg gaggcaggag gaggggtggg acaggctttc 3720  
 tctctctctt tccccccacc ccgcgcgggg ctcgcccccc gcctctctcc cggggcgctc 3780  
 tcttggctcc caggctgagc ccggtcggag cctgcgaggc aaccggcaag aggtcgagta 3840  
 gtctccgggt gcgggcccgc ccggcggggc tcggtccagt cctcatggcc gcctctcact 3900  
 tag 3903

<210> 2  
 <211> 4594  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> Misc\_binding

AZ0633.ST25.txt

<222> (3844)..(3851)  
<223> AP-2

<220>  
<221> GC\_signal  
<222> (4080)..(4087)  
<223> Complement

<220>  
<221> GC\_signal  
<222> (4196)..(4205)  
<223> Complement

<220>  
<221> GC\_signal  
<222> (4241)..(4249)  
<223> Complement

<220>  
<221> GC\_signal  
<222> (4272)..(4279)  
<223> Complement

<220>  
<221> Misc\_binding  
<222> (4308)..(4315)  
<223> CRE

<220>  
<221> Misc\_binding  
<222> (4375)..(4381)  
<223> Initiator

<400> 2  
atgttgctgc tgctgctact ggcgccactc ttcttcgcc ccccgggcgc gggcggggcg 60  
cagaccccca acgccacctc agaaggtgca tctttcttcg acgacctccg gccctccttc 120  
gtctcacttc cttttccctg catctctca tttctggtec tcactactat cccatcagtc 180  
ccacatatca tcccggctcg gcaacccctt ctgctcggcc cgactttact actgctgacc 240  
tctttctgtc accccacgtt actatccagc acctcttttc tctgcccaca ttgctacact 300  
ataccacctt cctgtgcatt ttctccgct caatccctt tcccagcccc acattactac 360  
ctcaattact ccttttctt ggteccactt tgetgtccag atgacttat tagctccct 420  
ttatctctct atcctaattc aactggaata tctcattta gccttttttt ttaaagaaaa 480  
gtccaccca catatcatc cttcatgat ttcttaatta cttttcttcc ttacctccac 540  
ccagcaccct tccctcccca cttgtgggtt ctctcatcag ctttaaccct ggccctttac 600  
tctctgtcct ttagccaggg gatctgtacc tgtccccact cccacctct agtgcccat 660  
ccctcttctt ctgtccccag cctgcccaca gaccacgccc tactctccc ttctccac 720  
tggggagcct gccttttctt ctttcccacc attctctctt gfatgcctcc ccgactcacc 780  
ccttaggttg ccagatcata caccgcccct ggggaagggg catcaggtag cggggcctga 840  
ctcgggacca ggtgaaggct atcaacttcc tgccagtggg ctatgagatt gagtatgtgt 900

Page 4

AZ0633.ST25.txt

gccgggggga gcgcgaggtg gtggggccca aggtccgcaa gtgcctggcc aacggctcct	960
ggacagatat ggacacaccc agccgctgtg gtgagtagcc tcggaagccc ctccccctctt	1020
caagactatt ctttttcctg ccgcaaacctt agcattactg cttgcaagtc agcactttaa	1080
atccagtata ccaaaattca caaatacatt tattgaatga ctactacata agagcaattt	1140
tgctctgtgc ggttgagggt agtagagcta gcagcctgca cagttcattt catcctccct	1200
tcattaggcc actgatcatt ggcctataac attgataatt catcttgtca gttattctct	1260
ttgaggatca ttagtggcag atgatgacaa aaaaattcta aaatgatttc atcacatttt	1320
tgaatacctc tgtcaccaac ccagagacca tatgcccaag aaacaaaagc cagtttaata	1380
ttaatagaag ccaactataa taagaaaagc aaatctgatt gtgcatccaa agttatatac	1440
atctacatat ttcaaagcca gagaaccgcc cactgtagct gactttgaag agatcccatt	1500
ttgtgtgctt atagcccat cttgggttcc taaaatggta atttttttt tcttttggga	1560
atgtgtggat gcttgacag gtaagggagg attggaagat aggtaggcaa atccttttca	1620
catgtgattt tcttttagagc aggatgcttg tggacccaaa cctgcacctg agtccccctgc	1680
tctttaaagg gaaagagcct tcttcaactc gcctctcttc ttattttcct atctctccac	1740
agtccgaatc tgctccaagt cttatttgac cctggaaaat ggggaagggtt tcctgacggg	1800
tggggacctc ccagctctgg acggagcccg ggtggatttc cgggtgacc ccgacttcca	1860
tctggtgggc agctcccga gcatctgtag tcagggccag tggagcacc ccaagcccca	1920
ctgccagggt gaggggaaca gctgcctgca tgcagctgat gaggacgctt gtgtgaggat	1980
gggagtgggg tgggaatgga taatgggaaa gaatggagag ctataaaaat gtgggggagg	2040
acactggaaa ggggagatga aagtccctt tctctccatc acctgectca aacttcctct	2100
tgcagtcctc ggtatcctct gtaggttggg ggcttccttc ctttaccttt taaaaaaatc	2160
ttcctgtctc cgattcttag acctcacgtt ttctcttttc ctttatgaat ctcacctctc	2220
tcaccttctt cagggtttaaa tactccaatt ttccctttct ctaaacttag aaatttccat	2280
gcatcacctt cttctagaat tcatecctca ccattcctta tataattgat ttattgtaaa	2340
gactcagaaa taaatcaaac attctactaa gaaaaattga gaaggggagc tctgggggtg	2400
gaaacatatt agggtaaaag acttaaaatt ggaggcagca ttatcagaag atgaagaaca	2460
actcagggat ggggtgggaa gaagacaggt cttttctgk acttcttaga caacctccat	2520
tattccctaa gggaatcagt gttgtgtctg tctacyttt ttttttttt ttgcccacgt	2580
aattttacaa actctccctt ttctaggcac ccgaactctc tgccatcttc tctcctggga	2640
tgcagtcate ccatttgtat gcctcactt tctctaccc tggtagattc ttcaagatc	2700
cttgggcttt actttcctca cataactcag ttattctgct tctagtttac cattttatc	2760

AZ0633.ST25.txt

tggaaattga gagtcccatc caggggtgga cttatgacac tactgaaact tagacttcaa	2820
ggttcctcac ctacagggcc ctcttctgt gctctaataa tatagagggc tcgatggata	2880
tgtgttcata tggtaacagg cttttgtaaa aattgcagaa ataagatttt aacagcaatt	2940
gcttaaagcc aattgtatgt gtaatttttt ttcttaaaga ctcccaattt tgtaatatcc	3000
aggcaccaca gaaccaagat ctgccccaaa cttagctatt ggcatteccg tctcaaattc	3060
tgttgtccta tgaaaaatcg aagaagaaaa taagtccctga ccccttacc cccagaccca	3120
ccttgttctt atccccaggc accctccct cagaaacgca ggcttctgt ctccccggtc	3180
ttcagcatgg acaggtgtgg gagggggctg gggatcaggc cagggaaagt gggcgccagt	3240
ggtaactctt ctctgatccc cgtctttctt gctgccagt aatcgaacgc cacactcagg	3300
tgagatgaga aacccttacc gcgcgcactg caatgcctc ccttccactc tgcacctcc	3360
acccccctga aattctgccc ttaggctacg gggcgctgct ctttcgcacc ttccccaacc	3420
cacccagtt tgcgccacc ccttccctc cctatctgtt tctgcctc agtcccggtt	3480
ttccacgagg ctgcggtctc tcttgcctc tggttggcta cacttccctg ggctccact	3540
cctcccagac tgagcctcg cggtgtcagg cagagcccag cagargcg caggggtgtg	3600
ggagaccctg agtcccacc acgttttccc ctgtggggtt ccttgcgacc ttcgctggaa	3660
ccttttccag cctgtgcct cctaggattt cacctaattg actttctcag cctgtcccac	3720
ccatcccaac cctggccagg cctctcgcgc tcttcccac atcttttct tccgtgtacc	3780
ccttccctcg tcttttctca attccatgct ctgtctcct ttcttaggct tctgtctacc	3840
cagccccagg ctcccttcca cgacccacc actccctcaa accagcctcc cttccgtacc	3900
caactcgttc cctccaaaac cgtttctct cccccacatc ctcatgtct cactgtatcg	3960
actcatactc ccacttcaga cctcaggcgc cagccccgtt tctctccgt cccactcgca	4020
tccttccctt cctaccctgg ttctcctgct cttcagctc ccgcggtcc ctcgcccac	4080
cccgcctcc tggcacgccc cgtcccatc tctctccc tcgggtccc ttaagtgaga	4140
tccttccctt cctctttcgt tctttctc ctcgaggtg catccccct cccctccccg	4200
cccctccgac tgtegtccc acctcggcgc tcgcttccct ccccgcccc ttcctgcctc	4260
cccagctccc gcccgcccc ccacccccg ctgcccgcgc ccgcccgtga cgtcagagcc	4320
ccctcccage cccacatct cctcctgct cctctcctc cctccgtcgg tcagtcagtc	4380
cgcgaggaga gtccgcggtg gcggcgacgg tggcgagagc cgcgggggccc gtaggaagcc	4440
aaccttccct gttcttccg ggccctcgc cctctctcc caaaaatca gggatggagg	4500
cgctccccg gcacctctt agcagccct cccgggaaaa gtgtcccccc tgagctccta	4560
acgctcccca acagctaccc ctgcccccca cgcc	4594

AZ0633.ST25.txt

<210> 3  
<211> 23  
<212> DNA  
<213> Artificial

<220>  
<223> HindIII site fused to Pla seq 3440-3424

<400> 3  
aagcttctcg gcgcgcgggc ccg

23

<210> 4  
<211> 24  
<212> DNA  
<213> Artificial

<220>  
<223> NheI fused to Pla sequence 2341-2362

<400> 4  
gctagccaag agcttctgga gccg

24

<210> 5  
<211> 25  
<212> DNA  
<213> Artificial

<220>  
<223> NheI fused to Pla 720-741

<400> 5  
gctagctgtt acatgcagag caatc

25

<210> 6  
<211> 21  
<212> DNA  
<213> Artificial

<220>  
<223> HindIII site fused to Plb sequence 4439-4421

<400> 6  
aagcttccta cggccccgc g

21

<210> 7  
<211> 24  
<212> DNA  
<213> Artificial

<220>  
<223> NheI site fused to Plb sequence 3321-3340

<400> 7  
gctagcgcgc actgcaatgc cctc

24

<210> 8  
<211> 26  
<212> DNA

AZ0633.ST25.txt

<213> Artificial

<220>

<223> P R 1b Cre Fwd

<400> 8

cgccgccgt ttggtcagag cccct

26

<210> 9

<211> 26

<212> DNA

<213> Artificial

<220>

<223> P R 1b Cre Rev

<400> 9

agggggctct gaccaaacgg gcggcg

26

<210> 10

<211> 26

<212> DNA

<213> Artificial

<220>

<223> P R 1a GCI Fwd

<400> 10

ctctcttccc ccctaactgc cttccc

26

<210> 11

<211> 26

<212> DNA

<213> Artificial

<220>

<223> P R 1a GCI Rev

<400> 11

gggaaggcag ttagggggga agagag

26

<210> 12

<211> 26

<212> DNA

<213> Artificial

<220>

<223> P R 1a GCII Fwd

<400> 12

ggcgggtccag ttaggggctg ggatcc

26

<210> 13

<211> 26

<212> DNA

<213> Artificial

<220>

Page 8



AZ0633.ST25.txt

<223> P R 1a GCII Rev

<400> 13

ggatcccagc ccctaactgg accgcc

26

<210> 14

<211> 30

<212> DNA

<213> Artificial

<220>

<223> P R 1a GCIII Fwd

<400> 14

cctctccacc gccctaacca ccgcgctgtg

30

<210> 15

<211> 30

<212> DNA

<213> Artificial

<220>

<223> P R 1a GCIII Rev

<400> 15

cacagcgagg tggtagggc ggtggagagg

30

<210> 16

<211> 28

<212> DNA

<213> Artificial

<220>

<223> P R 1b GCIV Fwd

<400> 16

ccccagctcc cgcctaacc cccacccc

28

<210> 17

<211> 28

<212> DNA

<213> Artificial

<220>

<223> P R 1b GCIV Rev

<400> 17

gggggtggggg ttagggcggg agctgggg

28

<210> 18

<211> 27

<212> DNA

<213> Artificial

<220>

<223> P R 1b GCV Fwd

<400> 18

Page 9

AZ0633.ST25.txt

cgcttccctc ccctaaccct tcctgcc

27

<210> 19  
<211> 27  
<212> DNA  
<213> Artificial

<220>  
<223> P R 1b GCV Rev

<400> 19  
ggcaggaagg gttaggggag ggaagcg

27

<210> 20  
<211> 27  
<212> DNA  
<213> Artificial

<220>  
<223> P R 1b GCVI Fwd

<400> 20  
ccctccctc ccctaaccct cgactgt

27

<210> 21  
<211> 27  
<212> DNA  
<213> Artificial

<220>  
<223> P R 1b GCVI Rev

<400> 21  
acagtcggag gttaggggag gggaggg

27

<210> 22  
<211> 26  
<212> DNA  
<213> Artificial

<220>  
<223> P R 1b GCVII Fwd

<400> 22  
ctccgccac ccctaactcc tggcac

26

<210> 23  
<211> 26  
<212> DNA  
<213> Artificial

<220>  
<223> P R 1b GCVII Rev

<400> 23  
gtgccaggag ttaggggtgg gcggag

26

Page 10

AZ0633.ST25.txt

<210> 24  
<211> 28  
<212> DNA  
<213> Artificial

<220>  
<223> P R 1b GCIVd Fwd

<400> 24  
ccccagctcc ctaactaacc cccacccc

28

<210> 25  
<211> 28  
<212> DNA  
<213> Artificial

<220>  
<223> P R 1b GCIVd Rev

<400> 25  
gggggtggggg ttagttaggg agctgggg

28

<210> 26  
<211> 26  
<212> DNA  
<213> Artificial

<220>  
<223> P 1 b consensus CRE sequence

<400> 26  
cgccgcccgt gacgtcagag cccctt

26